

U.S. Patent Application Serial No. 10/791,787  
Amendment filed March 26, 2007  
Reply to OA dated October 25, 2006

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1                   Claim 1 (Currently Amended)       A micro-oscillation element comprising:  
2                   an oscillation section;  
3                   a main frame;  
4                   at least one torsion bar connecting the oscillation section to the main frame for defining an  
5                   oscillation axis about which the oscillation section pivotally oscillates relative to the main frame;  
6                   and  
7                   a first spring and a second spring that cause the oscillation section to be supported by the  
8                   frame;  
9                   wherein the oscillation section is located between the first spring and the second spring, each  
10                  of the first spring and the second spring being deformable in response to oscillation of the oscillation  
11                  section about the oscillation axis; **and**  
12                  wherein the torsion bar is connected to a first portion of the oscillation section at which the  
13                  oscillation axis passes, each of the first and second springs being connected to a second portion of

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14 the oscillation section that is located away from the oscillation axis; and  
15 wherein each of the first and second springs has width which is largest at a portion for  
16 connection to the frame and progressively decreases toward the oscillation section.

Claim 2 (Canceled).

1 Claim 3 (Original): The micro-oscillation element according to claim 1, wherein the  
2 first and the second springs are plate springs.

Claim 4 (Canceled).

1 Claim 5 (Previously Presented): The micro-oscillation element according to claim 1,  
2 wherein the torsion bar has a cross-shape in a cross-section orthogonal to the oscillation axis.

1 Claim 6 (Previously Presented): The micro-oscillation element according to claim 1,  
2 wherein at least one of the first spring, the second spring and the torsion bar is formed with at least  
3 one hole.

1 Claim 7 (Previously Presented): The micro-oscillation element according to claim 1,  
2 wherein at least one of the first spring, the second spring and the torsion bar has a nonconstant width.

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1           Claim 8 (Previously Presented):     The micro-oscillation element according to claim 1,  
2       wherein at least one of the first spring, the second spring and the torsion bar has a nonconstant  
3       thickness.

Claims 9 and 10 (Canceled).

1           Claim 11 (Withdrawn):         The micro-oscillation element according to claim 1, further  
2       comprising an actuator for generating a driving force causing oscillation of the oscillation section.

1           Claim 12 (Withdrawn):         The micro-oscillation element according to claim 11, wherein  
2       a difference between a frequency of the driving force generated by the actuator and a resonance  
3       frequency of the oscillation of the oscillation section is 1% or less of the resonance frequency.

1           Claim 13 (Original):         The micro-oscillation element according to claim 1, wherein the  
2       oscillation section is provided with a mirror face for reflecting light.

1           Claim 14 (Withdrawn):         The micro-oscillation element according to claim 1, further  
2       comprising: a second frame disposed outward of the main frame; and third and fourth springs  
3       connecting the second frame to the main frame;

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4                   wherein the main frame is located between the third spring and the fourth spring, each of the  
5                   third and the fourth springs being deformable along with oscillation of the main frame.

1                   Claim 15 (Withdrawn):                   The micro-oscillation element according to claim 14,  
2                   wherein a direction in which the first and the second springs are spaced from each other intersects  
3                   a direction in which the third and the fourth springs are spaced from each other.

1                   Claim 16 (Withdrawn):                   The micro-oscillation element according to claim 15, further  
2                   comprising: at least one torsion bar defining a second oscillation axis about which the main frame  
3                   oscillates relative to the second frame.

1                   Claim 17 (Withdrawn):                   The micro-oscillation element according to claim 16, wherein  
2                   the second oscillation axis intersects the oscillation axis of the oscillation section.

1                   Claim 18 (Withdrawn):                   The micro-oscillation element according to claim 17, wherein  
2                   the second oscillation axis intersects the oscillation axis of the oscillation section at 90°.

Claims 19-22 (Canceled).

1                   Claim 23 (Currently Amended):                   The micro-oscillation element according to claim 1,

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2 wherein each of the first and second springs has thickness which is larger at portions for connection  
3 to the frame and the oscillation section, respectively, while being smaller at an intermediate portion  
4 between the frame and the oscillation section.

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